

What is claimed is:

1. A display device comprising:

an electron source;

a phosphor layer which emits light when the phosphor layer is excited by electron beams from the electron source; and

a panel on which the phosphor layer is formed, wherein phosphor which constitutes the phosphor layer is formed by adding at least one of ytterbium ion (Yb^{3+}) or samarium ion (Sm^{3+}) to a terbium ion (Tb^{3+}) activated phosphor which contains zinc (Zn), yttrium (Y), silicon (Si) and oxygen (O) as base materials.

2. A display device according to claim 1, wherein the addition concentration of the ytterbium ion (Yb^{3+}) is 10 μg or more and 1000 μg or less per 1g of the phosphor.

3. A display device according to claim 1, wherein the addition concentration of the samarium ion (Sm^{3+}) is 30 μg or more and 300 μg or less per 1g of the phosphor.